### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants : John Hindman et al.

Application No. : 09/827.509 Confirmation No. : 6107

Filed : April 5, 2001

For : SYSTEMS AND METHODS FOR PROVIDING THE

PROJECTED EFFECTS OF WAGERS ON

PARIMUTUEL POOLS

Art Unit : 3714

Examiner : Corbett B. Coburn

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February 2, 2009

Commissioner for Patents

P.O. Box 1450 Alexandria, Virginia 22313-1450

REPLY BRIEF

Sir.

Pursuant to 37 C.F.R. § 41.41(a), appellants are filing this Reply Brief in reply to the new Examiner's Answer dated December 3, 2008 (and the amendments dated January 15, 2009 of the Examiner's Answer), which included a new ground of rejection under 35 U.S.C. § 101. Appellants previously filed a Notice of Appeal on August 15, 2007, an Appeal Brief on March 12, 2008 (hereinafter "Appeal Brief"), and a Reply Brief on August 25, 2008 in connection with this case.

#### REMARKS

## I. Introduction

Appellants maintain the position that claims 1-31 of the present application are patentable in view of Nevada Gaming Commission Regulation 26, Pari-Mutuel Wagering ("Regulation 26") and Mindes U.S. Patent 5,842,921 ("Mindes"). Appellants submit that the December 3, 2008 Examiner's Answer (hereinafter "the Examiner's Answer") is insufficient as a matter of law to uphold the 35 U.S.C. § 103(a) rejections of claims 1-31 for at least the reasons set forth in appellants' Appeal Brief. Appellants also submit that the new ground of rejection under 35 U.S.C. § 101 is without merit. Appellants have filed this Reply Brief to address the new ground of rejection under 35 U.S.C. § 101, to address comments made by the Examiner in the December 3, 2008 Examiner's Answer, and to further demonstrate the patentability of appellants' claims 1-31.

## II. Summary of the Examiner's Answer

The Examiner's Answer maintained the § 103(a) rejections of claims 1-31 from the May 15, 2007 final Office Action and restates the same grounds of rejection from that Office Action.

The Examiner's Answer also included a new ground of rejection under 35 U.S.C.  $\S$  101 of claims 1-31 as being directed to nonstatutory subject matter.

# III. Summary of the Appellants' Reply

Appellants' Appeal Brief fully addresses the grounds of rejection stated in the May 15, 2007 final Office Action.

This Reply Brief will fully address the Examiner's additional comments in the Examiner's Answer as well as the new grounds of rejection under 35 U.S.C. § 101.

Appellants submit that the Board should find the final rejections of claims 1-31 under 35 U.S.C. § 103(a) and the rejection under 35 U.S.C. § 101 to be in error and should reverse the Examiner.

# IV. Appellant's Reply to the New Ground of Rejection of Claim 1-31 Under 35 U.S.C. § 101

In the Examiner's Answer, the Examiner issued a new ground of rejection of claims 1-31 under 35 U.C.S. § 101. According to the Examiner's Answer, the claimed invention is directed to nonstatutory subject matter because "[a]ppellant appears to be attempting to patent an idea or fundamental principle." See Examiner's Answer, page 5. In addition, the Examiner's Answer contends that "all methods of providing the projected effect of a proposed wager would infringe upon the claimed invention" and that appellants' methods preempt substantially all uses of a fundamental principle. Id. Appellants respectfully disagree.

## A. Claims 1-31 Satisfy Bilski

Appellants and the Examiner both note that the Federal Circuit has recently issued an *en banc* opinion relating to patentable subject matter. *See In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008). According to the Federal Circuit, the sole test for patentable subject matter is the "machine-or-transformation" test. *Id.* at 956. This test, according to the Federal Circuit,

is a two-branched inquiry; an applicant may show that

a process claim satisfies 101 either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article. Certain considerations are applicable to analysis under either branch. First, . . . the use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patenteligibility. Second, the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity. Id. at 961-62 (internal citations omitted).

As described in more detail below, appellants' claimed invention is clearly tied to a particular machine -- namely an interactive wagering system. Even if appellants' claimed invention were not tied to a particular machine, it nevertheless transforms a "tangible article" as defined by the Federal Circuit. For these reasons, appellants request that the Board overturn the 35 U.S.C. § 101 rejection.

# B. Appellants' Claimed Invention is Tied To an Interactive Wagering System

As recited in the preamble of both independent claims 1 and 17, appellants are claiming methods for providing projected effects of wagering "in an interactive wagering system." Both independent claims 1 and 17 recite receiving user input to create or propose a wager that is associated with at least one parimutuel pool. Information is then obtained from the at least one parimutuel pool, and either the projected effect (claim 1) or projected odds (claim 17) are provided to the user. As recited in the preambles of claims 1 and 17, all of these steps are performed or initiated by an "interactive wagering system."

Appellants' claimed invention is therefore clearly tied to a particular machine -- namely an interactive wagering system capable of receiving user input to create or propose a wager and in communication with at least one parimutuel pool. This construction of appellants' claims is indisputable.

In addition, appellants' claims "impose meaningful limits" on the scope of the claimed invention. For example, appellants' claims are directed to providing the projected effect or projected odds associated with a proposed wager to a user in an interactive wagering system. Appellants are not attempting to preempt the presentation of actual odds or the actual effect associated with a fully submitted or placed wager.

In addition, both independent claims 1 and 17 recite that the projected effect or projected odds are provided to the user "without changing the at least one parimutuel pool." As described below in § V.C., there are several other ways to provide the projected effect or projected odds of a proposed wager to a user. One approach would be to actually incorporate the proposed wager into the parimutuel pool and compute the change in effect or change in odds. Another approach would involve a user manually computing the projected effect or projected odds. Yet another approach would involve using a system that is not an interactive wagering system. These approaches are not covered by appellants' claims. Rather, appellants' claimed invention provides the projected effect or projected odds to a user in an interactive wagering system "without changing the at least one parimutuel pool," as

recited by independent claims 1 and 17. Appellants' claims, therefore, do impose meaningful limits on the scope of the claimed invention.

Nor is the involvement of the interactive wagering system mere "extra-solution activity." The interactive wagering system is much more integral to appellants' claimed invention than gathering data (see In re Grams, 888 F.2d 835, 839-40 (Fed. Cir. 1989)) or recording a result (see In re Schrader, 22 F.3d 290, 294 (Fed. Cir. 1994)). Rather, as described above, appellants' claimed steps are inextricably tied to the interactive wagering system. As a result, any attempt to categorize this system as "extra-solution activity" must fail.

C. Appellants' Claimed Invention is Limited to a Practical Application to Transform Specific Data Subject matter can also be patent-eligible if it transforms a particular article. See Bilski, 545 F.3d at 954. In Bilski, the Federal Circuit clarified that the transformation of a particular article may include the electronic transformation of the article. See id. at 962-63. In fact, the court noted that "the electronic transformation of the data itself into a visual depiction" is sufficient to be patent-eligible. Id. at 963. The underlying transformation of a physical object represented by the data is not required. Id.

As stated by the Federal Circuit,

[s]o long as the claimed process is limited to a practical application of a fundamental principle to transform specific data, and the claim is limited to a visual depiction that represents specific physical

objects or substances, there is no danger that the scope of the claim would wholly pre-empt all uses of the principle. *Id.* at 963.

Here, appellants' claims provide the projected effect or projected odds to the user of an interactive wagering system. Regardless of how the projected effect or projected odds is provided (e.g., audibly through speakers or visually on a display), the claims necessarily involve the transformation of specific data (namely, parimutuel pool data). This specific data is transformed as part of a practical, real-world application (namely, providing the projected effect of a proposed wager to a user) and is therefore patent-eligible. The underlying physical object or substances represented by the data (i.e., the wagers and corresponding wager tickets) belonging to the users of the system need not be transformed.

For at least the foregoing reasons, appellants respectfully submit that the new ground of rejection of claims 1-31 under 35 U.S.C. 101 should be overturned.

V. Appellants' Reply to the 35 U.S.C. § 103
Rejection of Independent Claims 1 and 17
Appellants respectfully submit that the Examiner's
Answer is insufficient to uphold the 35 U.S.C. § 103(a)
rejection of claims 1 and 17 over Regulation 26.

In rejecting a claim under 35 U.S.C. § 103, the Examiner must provide a factual basis to support the conclusion of obviousness. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967). Based upon the objective evidence of record, the Examiner is required to make the factual inquiries mandated by

Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966). The Examiner is also required to explain how and why one having ordinary skill in the art would have been realistically motivated to modify an applied reference and/or combine applied references to arrive at the claimed invention. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

The Examiner's Answer makes it clear that the obviousness rejection cannot be maintained. Appellants' claimed invention, inter alia, is directed to providing the projected effect of a proposed wager (e.g., projected odds) to a user without changing a parimutual pool. The Examiner's Answer concedes that the sole reference relied upon in the rejection fails to disclose providing such a projected effect to a user.

Nevertheless, the Examiner alleges that "it has long been recognized that large bets can make a significant change in odds" (Examiner's Answer, page 6). In support of this allegation, the Examiner relies on Ian Fleming' fictional novel Diamonds are Forever (see Examiner's Answer, p. 6). The Examiner's reliance on a work of fiction, however, belies the Examiner's position that it is well known in the art. Furthermore, Diamonds are Forever states "put your money on just before the windows close. You'll shift the odds with that Grand of your. Okay?" (page 60). Nothing in this quote, however, suggests that anything has long been recognized. Moreover, this quote does not state that odds will significantly change when large bets are placed.

The reasoning behind the Examiner's rejection may be summed up in the following quote from the Examiner's Answer:

Examiner contends that it is obvious to ask what the effect of a proposed wager would have

on the odds since large wagers are known to make significant changes in the odds and since these odds determine the payout. And once the question is asked, it would be obvious to use the only method of calculating the projected effect of proposed wager on the odds to arrive at the answer. Page 7.

This reasoning, however, is based solely on the Examiner's subjective opinion that it would have been obvious to ask the question of what effect a proposed wager would have on parimutuel odds. The Examiner concedes that Regulation 26 does not even refer to proposed wagers or any effect that a proposed wager would have on odds. Instead, the Examiner states that he "merely contends that by defining the method of calculating odds in a pari-mutuel wager, Reg. 26 renders Appellant's claims obvious" (Examiner's Answer, page 7). Appellants respectfully disagree at least because based on the objective evidence of Regulation 26, it would not have been obvious to ask the question of what is the projected effect of a proposed wager on the odds. The Examiner's reliance on Ian Fleming's fictional novel also fails to teach that it would be desirable to know the projected effect a proposed wager would have on odds. Rather, Regulation 26 and Ian Fleming's fictional novel simply disclose that in parimutuel wagering, the odds are affected based on the wagers that are placed.

Moreover, parimutuel wagering was first invented in 1865 and automated totalisators for calculating parimutuel odds were first used in 1913 (See, e.g., http://en.wikipedia.org/wiki/Parimutuel\_betting). However, in the approximately 140 years since parimutuel wagering has existed and in approximately 95 years since automated parimutuel odds calculation devices were used, the Examiner cannot point to a single reference that

even suggests that it would be desirable to know the projected effect of a wager prior to placing the wager. Parimutuel wagering by definition means that odds are determined based on the wagers that have been placed. Appellants submit that if the Examiner's reasoning were correct, then projected odds would have been provided long ago back when parimutuel wagering was first invented. That, however, has not happened. Accordingly, appellants submit that the Examiner's obviousness reasoning is flawed and that appellants' claimed invention is not obvious.

The only objective teaching that does exist is found in appellants' own disclosure. Accordingly, appellants submit that the Examiner has simply taken appellants' own disclosure as a blueprint for modifying Regulation 26, thereby demonstrating mere hindsight reconstruction, which is the very syndrome that the requirement for objective evidence is designed to combat. See In re Dembiczak, 50 USPQ2d 1614 (Fed. Cir. 1999).

In view of the foregoing, appellants respectfully submit that the rejection of claims 1 and 17 should be overturned. Appellants will now address the additional statements made by the Examiner in the Examiner's Answer.

# A. The Examiner's Reliance on a Bank Balance Analogy

The Examiner alleges that "perhaps a simpler example would provide a clearer explanation of the arguments offered by both sides" (page 7). The Examiner then proposes a situation where a person named Joe wants to add money to a bank account having a fixed interest rate and the Examiner assumes that Joe wants to know what his balance will be at the end of a compounding period. Parimutuel wagering, however, is inapposite to bank balances.

The Examiner's admission that a bank balance is a simpler example alone shows that a bank balance is not an appropriate analogy to parimutuel wagering. Furthermore, the question the Examiner is proposing for a bank balance cannot be answered for parimutuel wagering. Future odds in parimutuel wagering, in contrast to future bank balances, cannot be determined in advance because wagers by other people will affect the future parimutuel odds.

Moreover, in the Examiner's bank balance analogy, the Examiner assumes as a starting point that Joe "wanted to know what his balance would be [at the end of the compounding period] if he added an extra \$100 to his bank account" (page 8) and then alleges it would have been obvious to answer the question. Such a starting point, however, does not exist in the present application. The Examiner has provided no objective evidence that it would have been obvious for one of skill in the art to ask what the projected effect of a proposed wager would be on a parimutuel pool.

Accordingly, the Examiner's bank balance analogy is inappropriate and has no relevance to the patentability of appellants' claims.

In addition, at the end of the bank balance analogy, the Examiner alleges that Appellants "contend[] that since the regulation fails to mention 'projected' effect and 'proposed' wager, this exercise in elementary mathematics would be beyond the level of ordinary skill" (Examiner's Answer, page 8). Contrary to the Examiner's allegation, appellants never made such a contention. Rather, as explained above, appellants argued that that one of skill in the art would not have found it

obvious to even try to calculate such a projected effect in the first place.

#### B. The Method Outlined in Regulation 26

The Examiner alleges that "Appellant essentially admits that one attempting to determine the projected effect ... would be forced to follow the method of calculating odds outlined in Reg. 26" (Examiner's Answer, page 8). Appellants never made such an admission. In fact, Regulation 26 is in effect for parimutuel wagering only in Nevada. Thus, the specifics of that Regulation are not required for parimutuel wagering in general. Moreover, appellants submit that there is more than one way to calculate the projected effect of a proposed wager as explained in subsection C below.

# C. "Without Changing the Pari-Mutuel Pool" Limitation

The Examiner alleges that "Appellant suggests that the limitation, 'without changing the pari-mutuel pool is the basis for patentability" (Examiner's Answer, page 9). Appellants never made such a suggestion. Rather, appellants were responding to the Examiner's position in the final Office Action that "there is simply no other way to calculate [projected] odds" other than to follow appellants' claimed approach (final Office Action, page 5). Appellants were only pointing out that projected odds could be calculated by inputting the proposed wager into the pari-mutuel pool (see Appeal Brief, pages 7-8).

The Examiner further alleges in the Examiner's Answer that it would be impossible to provide the projected effect of a wager by inputting the wager into the parimutuel pool (see Examiner's Answer, page 10). Appellants respectfully disagree

with the Examiner's reasoning because the system could input the wager into the pool for only a very short period of time and then withdraw it. This would alleviate the problems raised by the Examiner in the Examiner's Answer. Nevertheless, appellants maintain the position that it would not be obvious to provide the projected effect of a proposed wager in the first place.

## D. The Number of Solutions to a Question

In the final Office Action, the Examiner alleged that appellants' claims were "overbroad" because appellants are "attempting to patent providing accurate projected odds/payout information to the wager - thus precluding anyone else in the Unites States from providing accurate odds/payout information" (final Office Action, page 2). As explained in subsection C above, appellants respectfully disagree with the Examiner's characterization of the scope of appellants' claims.

Nevertheless, Appellants stated in the Appeal Brief that "[e] ven if there were only one way to determine the projected effect of a proposed wager, this fact alone should not militate against patentability" (page 8). The Examiner in the Examiner's Answer alleges "Actually, it does" (page 10).

Appellants would like to point out that the patentability issue in the final Office Action is obviousness. Appellants maintain their position that a single solution does not militate against patentability (i.e., nonobviousness). As explained above, the question the Examiner poses in the rejection of appellants' claims is not obvious in view of the objective evidence of record. Therefore, the number of solutions is irrelevant to obviousness in the present application.

The Examiner in the Examiner's Answer alleges that a single solution does militate against patentability citing to Gottschalk v. Benson, 409 U.S. 63 (1972). The Benson case, however, is directed to whether a mathematical formula is patentable subject matter under 35 U.S.C. § 101. Obviousness or nonobviousness under 35 U.S.C. § 103 was not addressed by Benson and thus Benson is not relevant to the obviousness issue of the present application.

The Examiner elaborates on *Benson* and then states "Perhaps a rejection under 35 U.S.C. § 101 might have been appropriate" (Examiner's Answer, page 11). Appellants respectfully submit that a § 101 rejection is not appropriate here, as demonstrated above in § IV.

Furthermore, in the Benson case, the applicant was attempting to patent a mathematical formula for converting binary-coded decimal numerals to pure binary numerals with no defined end use (see Benson at 68 and 71). The Supreme Court held that the Benson patent would "wholly preempt the mathematical formula" (See Benson at 72). Appellants' claims, in contrast to Benson, do not specify or patent a mathematical formula. Rather, appellants' claims specify providing a projected effect of a proposed wager. While a mathematical formula may be used to calculate appellants' claimed projected effect, appellants' claims do not wholly preempt the use of that mathematical formula. In other words, if appellants' claims were granted, they would not cover all uses of a mathematical formula. For example, appellants' claims would not preempt the use of the formula for calculating actual odds. Thus, a § 101 rejection is not appropriate here.

In the same section, the Examiner also states that the

"Examiner contends that the fact that this is the one and only method of determining the effect of a projected wager on a parimutual pool and odds - a method that is well known - renders use of this method obvious" (Examiner's Answer, page 11). Contrary to the Examiner's contention, there is not only one way to determine the effect of a projected wager as explained above in subsection C. Moreover, even if there was only one way, appellants submit that it would not have been obvious for one of skill in the art to provide such a projected effect.

# E. Applying Known Methods to Yield Predictable Results

The Examiner states in the Examiner's Answer that "[0]ne may show obviousness by showing that one of ordinary skill could apply known methods to make the modification to yield predictable results" (Examiner's Answer, page 11). The Examiner then alleges that "junior high school algebra represents a 'known method'" and that "the modification [of Regulation 26] would yield predictable results - after all, it is just an elementary problem in mathematics" (Examiner's Answer, page 11). Appellants submit that this reasoning is insufficient to find appellants' claims obviousness.

Regulation 26 relates to calculating parimutuel odds based on wagers that have been placed. Junior high school algebra is a branch of mathematics. The Examiner has identified no algebraic method that was known for calculating projected effects of proposed wagers. Accordingly, based on the objective evidence of record, the Examiner has identified no known method that one of skill in the art could have applied to modify Regulation 26 to achieve appellants' claimed invention.

#### F. Teaching-Suggestion-Motivation Test

The Examiner at pages 11-12 of the Examiner's Answer again alleges that there is sufficient motivation to modify Regulation 26. First, the Examiner alleges that "it is well known that large wagers can cause significant changes to odds" (Examiner's Answer, pages 11-12). As explained above, the Examiner cites to no objective evidence in support of this allegation. Moreover, even if this were well known, this itself is not a motivation.

The Examiner also alleges that "If someone is going to make a large wager he has a motivation to try to calculate the effect that wager might have on the odds" (Examiner's Answer, page 12). The Examiner' allegation, however, is based on the Examiner's own subjective opinion. The Examiner cites to no objective evidence of record showing that such a motivation was known or that a wagerer wanted to know the projected effect prior to appellants' invention. Accordingly, appellants maintain their position that appellants' claimed invention is not obvious.

# G. Benefit of Appellants' Claimed Invention

In the Appeal Brief, Appellants stated the following: Because the large majority of typical wagers have no significant effect on the parimutuel pool, appellants submit that the claimed invention would be of limited use to the majority of wagerers. As such, the need for providing the projected effects of proposed wagers in most cases would be small. Page 9.

In response to this statement, the Examiner alleges that "Appellant is forced to admit that there is a need" (Examiner's Answer, page 12). The Examiner, however, is taking

the Appellants' statement out of context. Appellants have not admitted that there was any known need <u>prior</u> to appellants' invention. Rather, appellants only pointed out the limited use of appellants' claimed invention. Again, the Examiner is using appellants' own disclosure and its disclosed need as a blueprint to modify Regulation 26. This is impermissible hindsight reconstruction that is not based on any objective evidence.

The Examiner further states that since appellants' need "applies to the wealthiest of racetrack patrons, one of ordinary skill would be more than ordinarily motivated to meet that need" (Examiner's Answer, page 12). As discussed above, however, the Examiner has provided no objective evidence in support of this "need" other than appellants' discussion of their claimed invention. In addition, the Examiner's alleged increased motivation appears to be based on the following statement: "And, since the racetrack gets a percentage of ever[y] dollar bet, they really want that high roller to come back often" (Examiner's Answer, page 12). First, as discussed above, there was no known need prior to appellants' invention. Second, the Examiner is appearing to allege that by informing a high roller that his bet will significantly decrease his odds, this will cause the high roller to come back more often and bet more money. Contrary to the Examiner's allegation, common sense would suggest that the high roller would bet less money, not more, if he was informed that his wager would significantly lower his odds. Thus, appellants submit that this would lead one of skill in the art away from providing such a projected effect to a high roller.

#### H. Conclusion

For at least the foregoing reasons and the reasons set forth in the Appeal Brief, appellants respectfully submit that the Board should find the rejection of independent claims 1 and 17 under 35 U.S.C. § 103(a) to be in error and should reverse the Examiner.

#### VI. Dependent Claims 2-16 and 18-31

Appellants respectfully submit that the Board should find the rejections of dependent claims 2-16 and 18-31 to be in error and should reverse the Examiner for at least the same reasons why the Board should find the rejection of independent claims 1 and 17 to be in error.

# VII. Conclusion

For at least the reasons set forth above, appellants respectfully submit that claims 1-31 are in condition for allowance. The Examiner's rejections of these claims should be reversed.

Respectfully submitted,

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